UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,852	09/10/2003	Ray Cole	BMC530/4-002CON2US	5193

22892 7590 03/16/2005	EXAMINER
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ART UNIT	PAPER NUMBER
2162	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/658,852	COLE, RAY
	Examiner	Art Unit	
	Cam Y T Truong	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-21 are pending in this Office Action.

Drawings

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)
because they include the following reference character(s) not mentioned in the
description: The reference character 620 in figure 6 is not mentioned in the
specification. Corrected drawing sheets, or amendment to the specification to add the
reference character(s) in the description, are required in reply to the Office action to
avoid abandonment of the application. Any amended replacement drawing sheet should
include all of the figures appearing on the immediate prior version of the sheet, even if
only one figure is being amended. The replacement sheet(s) should be labeled
"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct
any portion of the drawing figures. If the changes are not accepted by the examiner, the
applicant will be notified and informed of any required corrective action in the next Office
action. The objection to the drawings will not be held in abeyance.

3.   A descriptive textual label for each numbered element in these figures would be
needed to fully and better understand these figures without substantial analysis of the
detailed specification. Any structural detail that is of sufficient importance to be
described should be shown in the drawing. Optionally, applicant may wish to include a
table next to the present figure to fulfill this requirement. See 37 CFR 1.83. 37 CFR
1.84(n)(o) is recited below:

(n)   Symbols . Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification. Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable.

(o) Legends . Suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible.

The drawing is objected to because the reference characters in figures 1 &2 have no label. Thus, these elements do not give a viewer to fully understand without substantial analysis of detailed specification.

Double Patenting

4.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with

37 CFR 3.73(b).

Claims 1, 8, 15 are rejected under the judicially created doctrine of obviousness-
type double patenting as being unpatentable over claims 1, 7 and 13 of U.S. Patent No.
6,418,437. Although the conflicting claims are not identical, they are not patentably
distinct from each other.

The application claims 1, 8 and 15 recites similar limitations in the patent claims

1, 7 and 13such as:

"baselining a table contained in the database, wherein the storage information is

obtained; making an entry into a transaction log, wherein the entry contains the storage

information; retrieving the storage information from the transaction log; and periodically

updating the storage information by monitoring subsequent entries in the transaction

log".

The patent claims 1, 8, and 15 recites different specific limitations in the

application claims 1, 7 and 13   such as:

Claims 1, 7 and 13 of the patent is directed to: "locking a particular table to be

baselined, thereby preventing modifications of the particular table; making an entry into

the transaction log that the particular table is to be baselined; preparing a storage area

to receive the storage information for the particular table; and unlocking the particular

table after it is baselined, wherein access to the particular table is restored".

The application claims 1, 8 and 15 do not contain specific limitations as shown in the

patent claims 1, 7 and 13; however, according to In re Goodman, the application claims

1, 8 and 15 are generic to the species of information covered by claims 1, 7 and 13 of

the patent. Thus, the generic invention is anticipated by the species of the patented

invention.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 6, 7, 8 and 15 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Nykiel et al (or hereinafter "Nykiel") (USP 5812849) in view of Draper

et al (or hereinafter "Draper") (USP 6192365).

As to claim 1, Nykiel teaches a method for obtaining and maintaining storage

information related to storage characteristics of a table in a database (col. 5, lines 40-

45), comprising: limitations:

"baselining a table contained in the database, wherein the storage information is

obtained" as (col. 5, lines 40-45). Nykiel does not teach the claimed limitations "making

an entry into a transaction log, wherein the entry contains the storage information;

retrieving the storage information from the transaction log; periodically updating the

storage information by monitoring subsequent entries in the transaction log". However,

Draper teaches the claimed limitations:

"making an entry into a transaction log, wherein the entry contains the storage

information" as a transaction log represents a sequence of transaction in a network of

connectable computers. Each transaction contains at least one update targeting an

object in a replica of a distributed target database. Each update object in the

transaction log has one or more unreplicated attributes containing the UOID of the

previous update object affecting the same database object. The updates for a single

transaction are all executed at one update location. The above information shows that

the system creates transactions in the transaction log. Each transaction is presented as

an entry. Each update object in transaction log is represented as storage information

(col. 12, lines 55-60; col. 36, lines 45-55; col. 2, lines 50-55);

"retrieving the storage information from the transaction log" as the portion of the

transaction log represented by the log database may be the entire log, or it may be a

smaller portion that only includes recent transactions. During one ore more iterations of

an inserting step 114 objects are inserted into the log database to represent updates,

transactions. The desired transactional treatment of updates requires that updates in a

given transaction are always committed to the replica 56 together. Thus, in inserting an

update as described herein, the replica manager 46 actually inserts a transaction

containing that update. Likewise, in consolidating two updates from separate

transactions, the replica manager 46 consolidates the transaction. And in moving an

update, the replica manager 46 moves an entire transaction to make two transactions

needing consolidation become adjacent to each other. This information shows that the

system has to retrieve update object before inserting an update object into the log

database, which includes transaction log. A object is represented as storage

information (col. 36, lines 10-40);

"periodically updating the storage information by monitoring subsequent entries

in the transaction log" as during an accessing step 116 an update history structure is

created or modified when the transaction is added or modified. The update history

structure may be implemented using an unreplicated attribute of each log database

object, an update tracking object in the log database. The update history structure for

transactions shows that the system monitors transactions in the transaction log.

Transactions are represented as entries (col. 36, lines 35-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to apply Draper's teaching to Nykiel's system in order to

improve the synchronization process or to maintain objects during making transactions

in transaction log (col. 2, lines 15-40).

As to claim 6, Nykiel teaches the claimed limitation "a function native to the

database performs the baselining step, and initial routine performs making an entry

steps and a monitoring routine performs the retrieving and periodically updating steps"

as (col. 20, lines 15-35).

As to claim 7, Nykiel teaches the claimed limitation "repeating the baselining and making an entry steps for additional tables as specified by a user" (col. 5, lines 40-49).

As to claims 8 and 15, Nykiel teaches the same claimed limitations as claim 1, except the claimed limitations:

"a processor" as the user creates tables 128 of the redevelopment database 120. This information shows that the user uses a computer system to create tables, thus, it is obvious that the computer system should have a processor (fig. 3, col. 5, lines 44-45);

"memory units, electrically connected to the processor, wherein the database system program directs the processor to retrieve portions of the database from the memory units for manipulation by the processor, and the storage information program directs the computer system to operate in a mode of operation to compute and monitor the storage information" as (col. 5, lines 5-60).

7.   Claims 5, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nykiel et in view of Draper and further in view of Clayton.

As to claims 5, 12, and 19, Nykiel does not teach the claimed limitation "the storage information includes information reflecting a block count, number of rows, average row length, average free space, and number of chained/migrated rows in the table". However, Clayton teaches the above claimed limitation as col. 2, lines 25-26; col. 4, lines 4, lines 55-60; col.5, lines 25-30. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Clayton's

teaching of each row has a fixed length, database table has a plurality of rows, the data

items in database table 12 are transferred one row, or record at a time to database table

14 to Nykiel's system and Daper's system in order to provide the expert system with a

conventional complementary database having a table that store a plurality of records of

available systems and to preprocess a request from a user by searching or transferring

the complementary database for a record identical to the record of the request.

8.   Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nykiel et in view of Draper and further in view of Chandra (USP 6058389).

        As to claims 13 and 20, Nykiel does not teach the claimed limitation "the

database system program is a database system program produced by Oracle

Corporation". However, Chandra teaches the above claimed limitation in col. 9, lines 15-

43. It would have been obvious to a person of an ordinary skill in the art at the time the

invention was made to apply Chandra's teaching of when the invention is implemented

with an object relational database management system such Oracle8 in order to allow

the system can use other type Oracle applications efficiently.

9.   Claims 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nykiel et in view of Draper and further in view of Bamford (US 5870758).

        As to claims 14 and 21, Nykiel teaches the claimed limitation "baseling each

table in the database" as (col. 5, lines 40-45). Nykiel does not explicitly teach the

claimed limitation "means for making an entry into the transaction log for each table baselined".

Bamfor teaches a transaction table includes a plurality of slots, where each slot can hold an entry that corresponds to a transaction. Each entry contains a sequence number, a status indication and a snapshot number for its corresponding transaction (col. 8, lines 55-63).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bamfor's teaching to Nykiel's system and Draper's system in order to maintain information stored in a database.

Allowable Subject Matter

10.   Claims 2-4, 9-11, 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 2, 9, and 16, none of the available prior art of record teaches or fairly suggest locking a particular table to be baselined, thereby preventing modifications of the particular table; making an entry into the transaction log that the particular table is to be baselined; preparing a storage area to receive the storage information for the particular table; and unclocking the particular table after it is baselined, wherein access to the particular table is restored".

Claims 3-4, 10-11 and 17-18 are dependent on claims 2, 9 and 16. Thus, they are objected on that basis.

Conclusion

11.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Zhang et al (5966709).

Contact Information

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam Y Truong/

Cam-Y Truong
Patent Examiner
Art Unit 2162
3/2/2005